MARK L. BURTON

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BIOGRAPHY

Mark Burton was awarded a Ph.D. in economics from the University of Tennessee in 1991. His professional career has included both academic and consultative research in the areas of regional, transportation, and telecommunications economics. In addition to authoring a number articles and monographs, Dr. Burton has provided testimony in connection with a variety of judicial and regulatory proceedings. In July of 2004, Dr. Burton was named as Director Transportation Economics at the University of Tennessee's Center for Transportation Research where he continues to provide research support for Tennessee's Department of Transportation (TDOT) Class I and short-line railroads, the US Army Corps of Engineers, and regional economic development organizations.

Dr. Burton has also prepared testimony for a number of State Attorneys General, including Illinois, Indiana, Iowa, Maryland, Ohio, and Texas. Generally, this testimony has been related to rail issues such as the Conrail transaction and the overall level of railroad competition (STB *ex parte* 575).

EDUCATION

Ph.D., University of Tennessee, May, 1991.
Dissertation: "Railroad Deregulation and Rail Rates: A Disaggregated Analysis." Supervisor: John W. Mayo.
Major Area of Specialization: Industrial Organization and Regulation.
Minor Area of Specialization: Regional Economics.

B.A., University of Missouri, Columbia, December, 1981, Economics

SELECTED PROFESSIONAL ACADEMIC EXPERIENCE

Research Associate Professor Department of Economics, Director of Transportation Economics, Center for Transportation Research, University of Tennessee – Knoxville, August, 2004 – present.

Research Professor, Center for Business and Economic Research, Marshall University, Huntington, West Virginia, August 2004 – present.

Associate Professor, Division of Finance and Economics and Director, Center for Business and Economic Research Marshall University, Huntington, West Virginia, July, 1998 – August 2004.

Assistant Director for Program Development and Management, Rahall Transportation Institute, January, 2003 – June, 2004.

Adjunct Professor, Department of Economics, Maryville College, January, 1997 – May, 1998.

Assistant Professor, Department of Economics and Business, Lafayette College, August, 1990 – January, 1996.

Instructor, Department of Economics, University of Tennessee, Knoxville, August, 1989, - August, 1990.

Research Assistant, Center for Business and Economic Research, University of Tennessee, Knoxville
May, 1988 – August, 1989.

Research Assistant, Tennessee Valley Authority, Knoxville, Tennessee, September, 1987 - August, 1988.

Instructor, Department of Economics, University of Missouri, Columbia, January, 1987 - May, 1987.

PROFESSIONAL CONSULTING EXPERIENCE

Subject Matter Expert (Energy Economics), Michael Baker Associates, September 2004 – present.

Telecommunications Consultant, America One Communications, Alexandria, Virginia, February, 1999 – present.

Visiting Economist, Water Resources and Navigation, Tennessee Valley Authority, Knoxville, Tennessee,
June, 1995 – June, 1998.

Telecommunications Consultant, AT&T (Various Jurisdictions), July, 1995 - present.

Office of the Ohio Attorney General, Competitive Effects of the Conrail Transaction, August, 1995 - present.

CSY Liquidating Corp. v. Trinity Industries, Consultant for the Plaintiff, September, 1996 - 1998.

U.S. Army Corps of Engineers, Missouri River Division, Missouri River *Master Control Manual* Review, December,
1989 - present.

U.S. Army Corps of Engineers, Rock Island District, Upper-Mississippi – Illinois Waterway Navigation Feasibility
Study, June, 1994 - 1999.

U.S Army Corps of Engineers, Huntington District, Ohio River Navigation Feasibility Study, August, 1995 - present.

U.S. Army Corps of Engineers, New Orleans District, Port Allen Cut-Off Feasibility Study. October, 1995 - May, 1996.

U.S. Army Corps of Engineers, New Orleans District, Southern Pacific line relocation negotiations, May, 1996.

OTHER EMPLOYMENT EXPERIENCE

Representative, Law Department, Burlington Northern Railroad, July, 1982 - June, 1985.

SELECTED REFEREED JOURNAL PUBLICATIONS

"Understanding Participation in Social Programs: Why Don't Households Pick up the Lifeline?" with Jeffrey T. Macher, Georgetown University and John W. Mayo, Georgetown University, *Berkley Electronic Journal of Economic Analysis, 2008*.

"Transportation And Market Feasibility Analysis For Innovative Coal Combustion By-products: WoodBrik™ in Greenbrier County, West Virginia ," with Michael Hicks and Kent Sowards, *International Journal of Environment and Waste Management*, Vol 1, No. 2, 2007.

"Do University Based Biotechnology Centers Impact Regional Biotechnology Related (Commercial) Employment," *International Journal of Technology Transfer and Commercialization*, Vol. 5, No. 4, 2006.

"Network Pricing: Service Differentials, Scale Economies, and Vertical Exclusion in Railroad Markets," with Wesley W. Wilson, University of Oregon, *Journal of Transport Economics and Policy*, May 2006.

"Estimating the Impact of Coal Slurry Impoundments on Residential Property Values," with Michael J. Hicks, *Minerals and Energy*, Fall 2005.

"Willingness to Pay for Water Transportation in the Ohio River Basin," *Transportation Research Record*, No 1871, 2004, pp. 5012.

"Evaluating Comprehensive Tax Reform: Lessons from West Virginia," with Michael J. Hicks and Calvin A. Kent, *State Tax Notes*, November 8, 1999, pp. 1239-55.

"Modeling Entry and Barriers to Entry: A Test of Alternative Specifications," with David L. Kaserman, Auburn University and John W. Mayo, Georgetown University, *The Antitrust Bulletin*, Summer, 1999, pp. 387-420.

"Rail Rates and the Availability of Water Transportation: The Missouri River Region," *Review of Regional Studies*, Summer 1995.

"Railroad Deregulation, Carrier Behavior, and Shipper Response: A Disaggregated Analysis," *Journal of Regulatory Economics*, December, 1993.

Selected Book Sections and Chapters

Encyclopedia of Appalachia, Transportation Section Editor and contributor, University of Tennessee Press, 2006.

"Railroad Operations and Economics," with Wesley W. Wilson in *The Transportation Engineers' Handbook*, McGraw – Hill, forthcoming.

"Shakeout or Shakedown? The Rise and Fall of the CLEC Industry," with David Kaserman and John W. Mayo in *Expanding Competition in Regulated Industries*, Michael A. Crew ed., Klouwer Academic Press, 2002.

"Resale and the Growth of Competition in Wireless Telephony," with David Kaserman and John W. Mayo in *Expanding Competition in Regulated Industries*, Michael A. Crew ed., Klouwer Academic Press, 2000.

Selected Additional Publications and Monographs

"Passenger and Freight Mobility in Tennessee: An Economic and Policy Overview," *An Economic Report to the Governor of the State of Tennessee*, Center for Business and Economic Research, The University of Tennessee, January 2011.

Focus, Southeastern Transportation Center, Editorial contributor, Quarterly column, "On the Horizon," Fall 2007-present.

"The Heartland Corridor: Opening New Access to Global Opportunity," with David B. Clarke, Appalachian Regional Commission, February 2009.

Economic Analysis of Coal Waste Disposal: Social, Environmental and Commercial Cost Considerations, Committee on Coal Waste Impoundments, National Academies of Science, (with Michael J. Hicks), 2001.

The Fiscal Implications of Judicially Imposed Surface Mining Restrictions in West Virginia, with Michael Hicks and Calvin Kent, Center for Business and Economic Research, Marshall University, February, 2001.

Coal Production Forecasts and Economic Impact Simulations in Southern West Virginia, with Michael Hicks and Calvin Kent, Center for Business and Economic Impact, Marshall University, June, 2000.

Transportation and the Potential for Intermodal Efficiency Enhancements in Western West Virginia: Phase I, Center for Business and Economic Research, Marshall University, June, 2000.

"Calculating the Value of Upper Mississippi River Navigation: Methodological Review and Recommendations," U.S. Army Corps of Engineers, New Orleans District, February, 1999.

"The Incremental Cost of Capacity in Freight Railroading," U.S. Army Corps of Engineers, St. Louis, Missouri, August, 1998.

"Available Navigation and the Incremental Cost of Railroad Capacity: Preliminary Lessons from the Upper Mississippi Basin, Proceedings of the Agricultural Outlook Forum 98, Washington, D.C., pp. 431-437.

"Available Navigation, Fuel Consumption and Pollution, Abatement: The Missouri River Basin," U.S. Army Corps of Engineers, Omaha, Nebraska, July, 1998.

"Rail Rates and the Availability of Barge Transportation: The Missouri River Basin," U.S. Army Corps of Engineers, Omaha, Nebraska, 1996.

Water-Compelled Railroad Rates and the Calculation of Navigation Project Benefits: A Preliminary Application to the Upper Mississippi River Basin," U.S. Army Corps of Engineers, St. Louis, Missouri, December, 1994

SELECTED EXTERNALLY FUNDED RESEARCH (1998 – PRESENT)

Includes only those projects where Prof. Burton served as Principal Investigator and when funding amount exceeded $30,000. Funding amounts indicate project totals. In some instances, significant funds were paid to research partners.

"Tennessee State Freight Plan," External Counsel, Tennessee Department of Transportation, $100,000, "April 2009 – present.

"Economic Impact Analysis for Proposed Infrastructure Initiatives," Kansas City Regional Planning Organization, with TransSystems, $50,000,October 2007 – present.

"Evaluating the Regional Economic Impacts of a Truck - Rail Intermodal Facility in Fayette County, Tennessee," Norfolk Southern Corporation, $52,000, September 2007, with William Fox.

"Assessing the Capacity of Class I Railroads as Related to Soo Locks Navigation Traffic," US Army Corps of Engineers, Huntington District, 34,900, September 2007.

"Strategies for Improving Transportation Access for Children's Health Services In Rural Communities," Children's Health Fund, $138,000, July 2006.

"Developing and Implementing an External Technical Assistance Program for Tennessee's Rural Planning Organizations," Tennessee Department of Transportation, $407,000, October 2006, with Mathew Murray.

"Evaluating Regional Economic Modeling Techniques and Software Alternatives," Tennessee Department of Transportation, $60,000, June 2006.

"Improving the Competitiveness of Appalachian Wood Products Producers through Coordinated Transportation," West Virginia Public Port Authority, $100,000, September 2005.

"Benefit and Cost Allocation for the Tennessee Rail Plan," (with Mathew Murray and Robert Bohm), Tennessee Department of Transportation, $180,000, June 2004.

"Broadband: Informing Public Policy," West Virginia Development Office, June 2004, $50,000.

"An Analysis of Opportunities to Improve Efficiencies Through Enhanced Intermodal Capabilities and Increased Utilization of the Appalachian Development Highway System," September 2002, Rahall Transportation Institute, $257,000.

"Expected Flood Damages to Transportation Infrastructures as a Proportion of Total Event Costs: A Methodological Exploration," August 2002, Rahall Transportation Institute and Tennessee Valley Authority, $94,000, with Michael Hicks.

"Transportation and the Potential for Intermodal Efficiency Enhancements in Northern West Virginia," March 2001, Rahall Transportation Institute and the West Virginia Department of Transportation, $106,000.

"West Virginia Double-Stack Initiative," January 2001, Rahall Transportation Institute and Norfolk Southern Corp., $550,000, with David B. Clarke.

"Modal Choice, Fuel Consumption, and Pollutant Emissions: Soo Locks / The Ohio River Basin, September 2000, US Army Corps of Engineers, Huntington District, $45,000.

"Public Support for the Development of Browns Island," September 2000, West Virginia Public Port Authority, $120,000

"Transportation and the Potential for Intermodal Efficiency Enhancements in Western West Virginia," September 1999, Appalachian Regional Commission, $94,000.

"Calculating the Value of Upper Mississippi River Navigation: Methodological Review and Recommendations," January 1999, U.S. Army Corps of Engineers, New Orleans District, $60,000.

SELECTED CONFERENCE PRESENTATIONS, REMARKS AND TESTIMONY

"Strategies for Improving Transportation Access for Children's Health Services In Rural Communities," American Public Health Association, Washington, DC, November 2007.

"Assessing the Role of Freight Railroads in the Search for Multi-Modal Freight Solutions: The Ghost of Railroads Future," SASHTO, Atlanta, Georgia, August 2006.

"The Goodwin Decision and Its Potential Impacts on Economic Conditions in West Virginia, American Coal Council Annual Meetings, St. Petersburg, Florida, September 2004.

"The Economics of Public-Private Partnerships," Transportation Research Board, Washington, DC, January 2004.

"Improving Access to Rail / Highway Intermodal Transport: Lessons from West Virginia," Transportation Research Board, Transportation and Economic Development 2002, Portland Oregon, May 2002.

"Assessing Transportation-Related External Costs: Valuing Decreases in PM-10 Emissions Due to Mode Switching," Transportation Research Board, Transportation and Economic Development 2002, Portland Oregon, May 2002.

"Measuring the Cost of Incremental Railroad Capacity: A GIS Approach," American Economics Association, Transportation and Public Utilities Group, New Atlanta, Georgia, January, 2002.

"Valuing the Air Quality Impacts of Modal Choice: More Evidence from the Ohio River Basin," Transportation Research Board annual meetings, Washington, DC, January 2001.

"Accurately Capturing the Effects of Transportation-Related Externalities," with Michael A. Newsome, U.S. Army Corps of Engineers Conference on Project Benefit Calculations, Knoxville, Tennessee, July, 2000.

"The Accidental Outcome: Ramsey Prices in Rail Served Markets," Western Economics Association, San Diego, California, July 9, 1999.

"An Alternative Treatment of Shipper Demands for Barge Transportation," U.S. Army Corps of Engineers, Economic Analysis Conference, Portland, Oregon, May, 1999.

"Assessment of Emissions and Fuel Use Changes Resulting from Modal Shifts in the Upper Mississippi River Basin," with Martin E. Lipinski (University of Memphis) and David B. Clarke (Clemson University), to be presented, Transportation Research Board annual meetings, Washington, D.C., January, 1999.

"The Incremental Cost of Railroad Capacity: Evidence from the Upper Mississippi Basin," Agricultural Outlook Forum, February, 1998, Washington, D.C.

"Railroad Capacity and the Transportation of Mined Materials," Mineral Economics and Management Society, annual meetings, Boulder, Colorado, March, 1, 1997.

"Railroad Capacity and the Calculation of Navigation Project Benefits," presented, Transportation Research Board annual meetings, Washington, D.C., January, 1997.

"Keeping Tributaries Open: Measuring a Waterway Segment's Economic Value," Panel Discussion, National Waterways Conference, St. Louis, Missouri, September, 1996.

"Network Externalities as an Incentive for Vertical Integration: Evidence from Surface Freight Transportation," Rutgers Conference on Regulatory Economics, Newport, Rhode Island, May, 1995.

"Equalizing Discrimination and Deregulated Railroad Rates," presented to the Eastern Economic Association, March, 1994, Boston.

"Rail Rates and the Availability of Water Transportation: The Missouri Valley Region," presented to the Southern Economic Association, November, 1993, New Orleans.

"Railroad Deregulation, Carrier Behavior, and Shipper Response," presented to the Southern Economic Association, November, 1991, Nashville, Tennessee.

"Railroad Deregulation and Rail Rates: A Disaggregated Analysis," presented to the Western Economic Association, July, 1991, Seattle.

REFEREE

Journal of Regulatory Economics
Eastern Economic Journal
Review of Regional Studies
Southern Economic Journal
Telecommunications Policy
Management Research Review

SELECTED ACHIEVEMENTS, HONORS, AND SERVICE ACTIVITIES

Board Member, Tennessee Operation Lifesaver, January 2005 – present.

Marshall University *Distinguished Artists and Scholars Awards* Team Research Award (with Michael Hicks), April 2002.

National Academies of Science, Transportation Research Board, Committee on Agricultural Transportation, January, 2004 – present.

National Academies of Science, Transportation Research Board, Committee on Inland Navigation, March, 2004 – present.

American Statistical Association / US Energy Information Administration Joint Committee on Energy Statistics, April 2001 – present.

Board Member, West Virginia Operation Life – Railroad Highway Grade Crossing and Pedestrian Safety Promotional Activities, March, 2000 – June 2004.

Walter Melville Bonham (Dissertation) Fellowship, College of Business Administration, University of Tennessee, Knoxville, August, 1989

J. Fred Holly Excellence in Economics Fellowship, Department of Economics, University of Tennessee, Knoxville, August, 1988

"Outstanding Graduate Teaching Award," The Graduate School, University of Missouri, Columbia, May, 1987